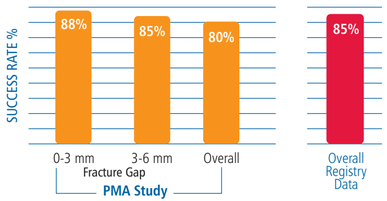
Physio-Stim model 3303

PHYSIO-Stim Bone Growth Stimulator

Indications Primary Treatment Sites: Distal Tibia and Fibula

Succes Rates The effect of Physio-Stim PEMF on fracture non-unions was demonstrated in an open trial PMA study which followed 181 patients with 193 fractures who had not healed on their own after nine or more months. In addition, Orthofix Patient Registry Data of 729 patients presenting 859 individual fractures treated with Physio-Stim resulted in the following outcomes [1,2]

1. PMA P850007/S20
2. PMA P850007



REFERENCES

Physio-Stim
- Long-term Follow-up of Fracture Nonunions Treated with PEMFs, Douglas E., Garland M.D., Barbara Moses, M.B.A., B.S.N., R. N., William Slayer, M.D.135 total fractures, gaps of 0-3, 3-6, 6-10, >10 mm and not measurable. 108 fractures healed; 80% overall.

Prefix²
- Stability with unilateral external fixation in the tibia, ,Giotakis N., Narayan B., Strategies Trauma Limb Reconstr. 2007 Apr; 2(1):13-20.
- Temporary external fixation for the management of complex intra- and periarticular fractures of the lower extremity, Haidukewych G.J., J Orthop Trauma. 2002 Oct; 16(9):678-85.

Procallus
- Distal tibial fractures treated with hybrid external fixation, Babis G.C., Kontovazenitis P., Evangelopoulos D.S., Tsailas P., Nikolopoulos K., Soucacos P.N., Injury. 2010 Mar; 41(3):253-8.

Sheffield
- Management of distal tibial intra-articular fractures with circular external fixation, Lovisetti G., Agus M.A., Pace F., Capitani D., Sala F., Strategies Trauma Limb Reconstr. 2009 Apr; 4(1):1-6.
- Treatment of high-energy tibial plateau fractures, Narayan B., Harris C., Nayagam S., Strat Traum Limb Recon 2006; 1:18-28.

XCaliber
- External fixation in the treatment of tibial pilon fractures: comparison of two frames in torsion. Scott A.T., Owen J.R., Khiatani V., Adelaar R.S., Wayne J.S. Foot Ankle Int. 2007 Jul; 28(7):823-30.
- Treatment of 103 displaced tibial diaphyseal fractures with a radiolucent unilateral external fixator. Dall'oca C., Christodoulidis A., Bortolazzi R., Bartolozzi P., Lavini F., Arch Orthop Trauma Surg. 2010 Apr 2. [Epub ahead of print]

eight-Plate
- Guided growth: 1933 to the present, Stevens P.M., Strat Traum Limb Recon (2006) 1:29-35.
- Guided Growth for Fixed Knee Flexion Deformity, Klatt J., Stevens P.M.; J Pediatr Orthop 2008; 28:626-631.
- Correction of Bone Angular Deformities: Experimental Analysis of Staples Versus 8-plate, Goyeneche R.A., Primomo C.E., Lambert N., Miscione H.; J Pediatr Orthop 2009; 29:736-740.

ISKD
- The intramedullary skeletal kinetic distractor (ISKD): first clinical results of a new intramedullary nail for lengthening of the femur and tibia, Cole J.D., Justin D., Kasparis T., DeVlught D., Knobloch C.; Injury. 2001 Dec; 32 Suppl 4:SD129-39.
- Femoral lengthening with the Intramedullary Skeletal Kinetic Distractor, Simpson A.H., Shalaby H., Keenan G.; J Bone Joint Surg Br. 2009 Jul; 91(7):955-61.
- Correction of a Post-Traumatic Femoral Length Difference Using an Intramedullary Distraction Nail] Bramlage R.J., Lahaye L., Burger C., Mueller M., Wirtz D.C., Weber O.; Z Orthop Unfall. 2010 Apr 13. Epub ahead of print. (GERMAN)

Centronail
- Koo 07 Radiation exposure during distal interlocking of intramedullary femoral and tibial nails King Hancock Orthop.

LRS/LRS ADVanced
- Distraction Osteogenesis for Lengthening of the Tibia in Patients Who Have Limb-Length Discrepancy or Short Stature, Aldegheri R.; J. Bone Joint Surg. Am. 81:624-34, 1999.
- Femoral lengthening using the callotasis method: study of the complications in a series of 70 cases in children and adolescents, Glorion C., Pouliquen J.C., Langlais J., Ceolin J.L., Kassis B.; J Pediatrics Orthopedics 1996; 16:161-167.
- Bone lengthening with extra-articular arthrodesis of the hip using external fixation, Mesa P.A.; Strat Traum Limb Recon (2008) 3:75-81.

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TIBIA & KNEE FRACTURES and DEFORMITIES

Prefix²

Indications Temporary external fixation of fractures in polytrauma and in cases of poor soft tissue conditions.
- Position screws where the condition of the bone and soft tissues permits
- Restore alignment
- Stabilize the fracture to allow the patient to be moved safely

Principles
- Guaranteed stability
- MRI compatibility*
- High flexibility
- Sterile kit options

** up to 1.5 Tesla. See instruction leaflet (PQ PFX) and Prefix² Operative Technique (PF-0902-OPT-E0)*

XCaliber

Indications Stabilisation of articular, meta-diaphyseal and diaphyseal fractures

Principles
- Sterile pre-packed kits (Hybrid and Meta-Diaphyseal Kit), ready to use
- Radiolucent
- Lightweight
- Include XCaliber Osteotite Screws, HA coated, proven protection against loosening

Centronail Tibia

Indications Diaphyseal fractures

Principles
- Distal hole 5 mm from end of nail
- Titanium nail and locking screws
- 4 proximal locking screws
- Distal targeting system
- Universal and versatile nail (one design for left and right tibia) with reduced inventory

ProCallus

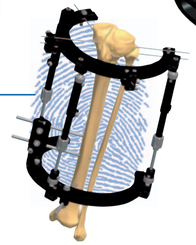
Indications Stabilisation of articular, meta-diaphyseal and diaphyseal fractures; hemicallotasis

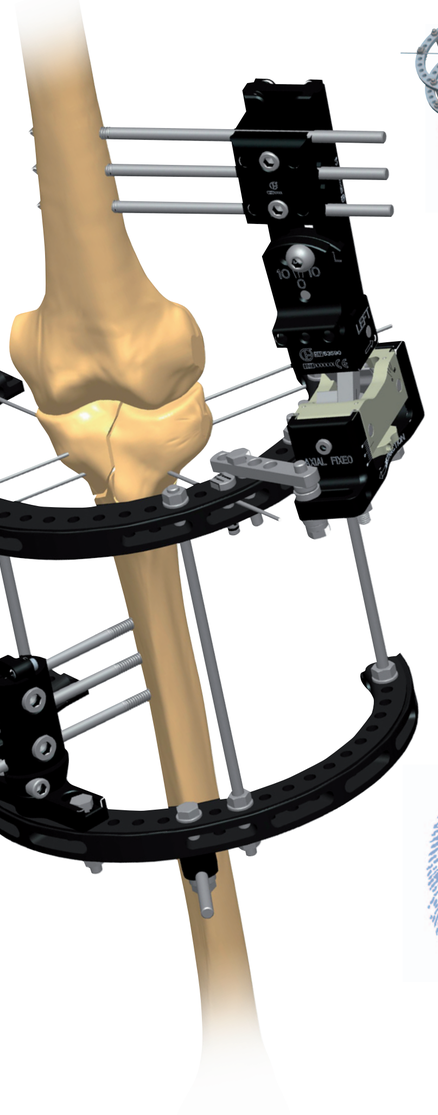
Principles
- Stable
- Modular and versatile

Sheffield

Indications Stabilisation of articular, meta-diaphyseal and diaphyseal fractures

Principles
- Lightweight, radiolucent carbon fiber construction
- Central slots allow multiple levels of wire fixation at higher tensions
- Circumferential grooves allow versatile wire placement
- 2/3 and 1/3 Rings which may be joined as a full ring

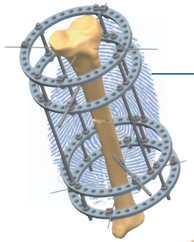




TrueLok™

Indications Limb lengthening, fixation of fractures, treatment of non-union and correction of bony or soft tissue defects and deformities

Principles
- Simple: pre-assembled functional blocks easy to connect and operate reduced number of components
- Flexible
- Stable



LRS ADVanced

Indications Reconstructive procedures for treatment of:
- Short stature
- Bone loss
- Open fractures
- Non-union
- Angular deformities

Principles
- Increase stability and versatility during angular correction
- Availability of radiolucent components
- Possibility of positioning screw in different planes matching various bone curvatures

ISKD

Indications Post-traumatic lengthening, lengthening following acute shortening, lengthening in cases of congenital shortening

Principles For surgeon:
- Lengthening with a simple nailing technique
- Gradual callus distraction provides a natural lengthening process
- Mechanical alignment and stability is maintained during lengthening and throughout consolidation avoids drift to Varus/Valgus

Eight-Plate

Indications Any angular deformity, regardless of etiology, in growing children or adolescents (age range 18 months to 17 years). The extra-periosteal eight-Plate acts as a tension band and does not violate the physis or inhibit its growth.

Principles

For surgeon:
- Simple, minimally invasive technique
- Learning curve = 1 to 2 cases
- Addresses multiple/complex deformities simultaneously
- Modular correction – can be repeated during growth as indicated

For patient:
- Outpatient procedure – minimal impact on school/work schedule
- Reduced surgical pain/risks
- Immediate mobilization/rehabilitation
- Flexible implant will tether (not compress) the physis, allowing more rapid correction